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NIH Smart Card ActivClient Windows Installation Guide

Version 1.0



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1 Introduction

1.1 Purpose

This document describes how to install ActivClient software on a Windows (XP or Vista) computer. ActivClient software, also known as middleware, enables computer applications to access a user's Public Key Infrastructure (PKI) digital certificates contained in the computer chip on their HHS smart card ID badge. Digital certificates enable a wide variety of desktop, network security, and productivity applications including desktop login, secure e-mail, and digital signatures.

1.2 Scope

These instructions are for installing ActivClient software on a Windows system. For instructions and middleware for Macintosh, Linux, and other operating systems go to http://smartcard.nih.gov/PIV_activclient.htm.

1.3 Related Documents

- [*Smart Card Diagnostic Guide for Windows Users*](#)
- [*NIH Smart Card Managing Windows Certificate Chains*](#)
- [*NIH Smart Card Outlook Configuration and User Guide*](#)



2 ActivClient Installation



Warning

You must have system administrator privileges to install ActivClient.

- Step 1. Create an ActivClient Software folder (usually on the desktop).
- Step 2. Download the [ActivClient PIV Middleware for Windows](http://smartcard.nih.gov/PIV_activclient.htm) (ActivClient_6.2.zip) from http://smartcard.nih.gov/PIV_activclient.htm.
- Step 3. Using WinZip, extract the contents of the ActivClient_6.2.zip file, downloaded in Step 2, to the folder created in Step 1.
- Step 4. In the ActivClient folder, click the **Start** icon.



Figure 1: ActivClient Installer Icon

- Step 5. **If you are running Windows Vista**, then you see one of the following two *User Account Control* windows (dependent upon your system privileges). If you are logged in as a non-administrator user, then you see the window seen in Figure 2, where you need to enter your administrator *User name* and *Password* and click **OK**. If you are logged in as a system administrator, then you see the window seen in Figure 3, where you just click **Continue**.



Figure 2: Vista Prompt for System Administrator User Name/Password



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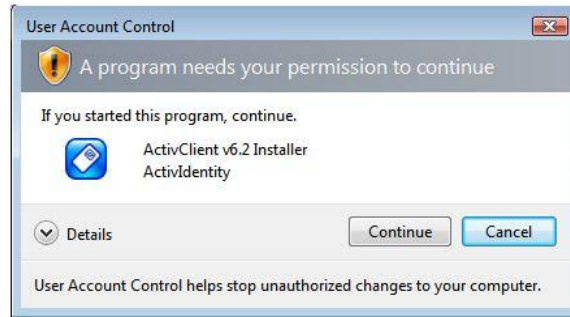


Figure 3: Vista Program Permission Prompt

- Step 6. When the installer starts, click **Quick Install** at the *ActivClient v6.2 Installer* window.

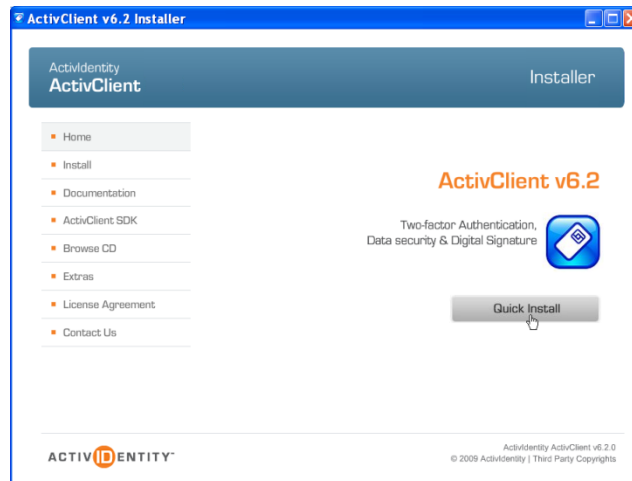


Figure 4: ActivClient v6.2 Installer Window

- Step 7. When the *ActivClient x86 - InstallShield Wizard* window appears, click **Next** at the *Welcome to the InstallShield Wizard for ActivClient x86* screen.

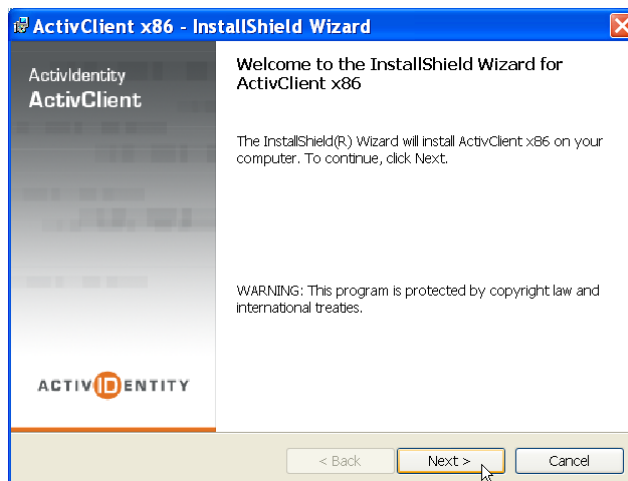


Figure 5: ActivClient InstallShield Wizard Welcome Screen

- Step 8. At the *License Agreement* screen, select the **I accept the terms in the license agreement** radio button indicating that you accept the terms of the license agreement, and click **Next**.

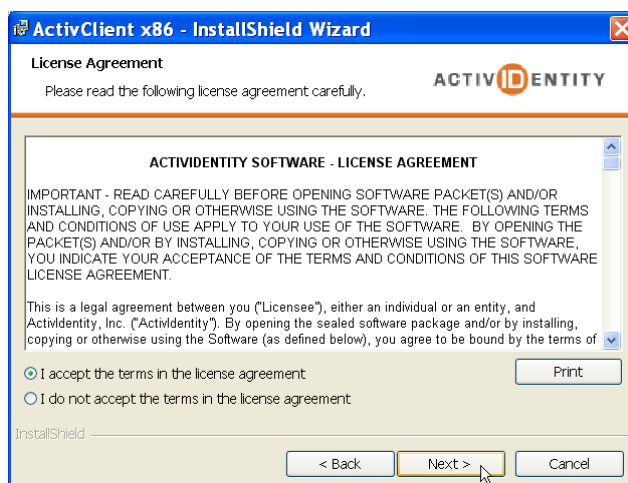


Figure 6: ActivClient License Agreement

Step 9. At the *Setup Type* screen, select the **Typical** radio button and click **Next**.

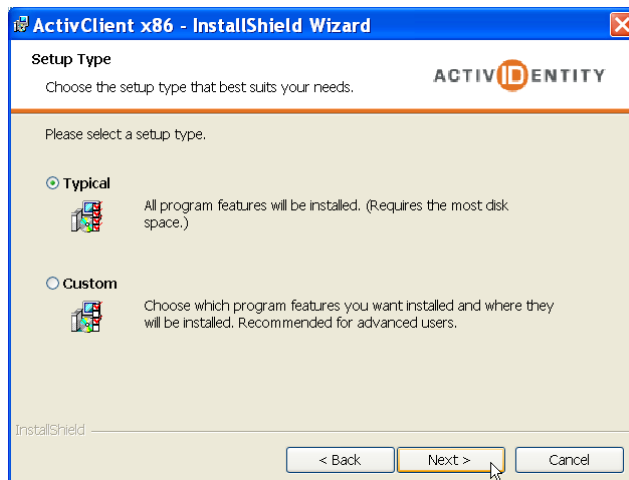


Figure 7: Install Setup Type Screen

Step 10. At the *Ready to Install Program* screen, click **Install**.

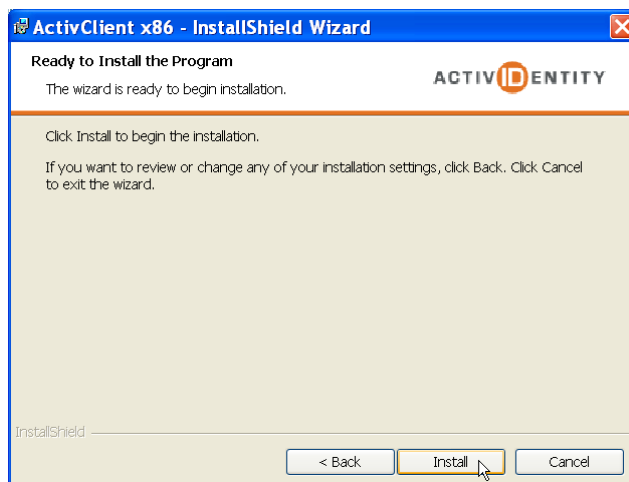


Figure 8: Ready to Install the Program Screen

Step 11. The InstallShield Wizard then installs and configures the ActivClient files.

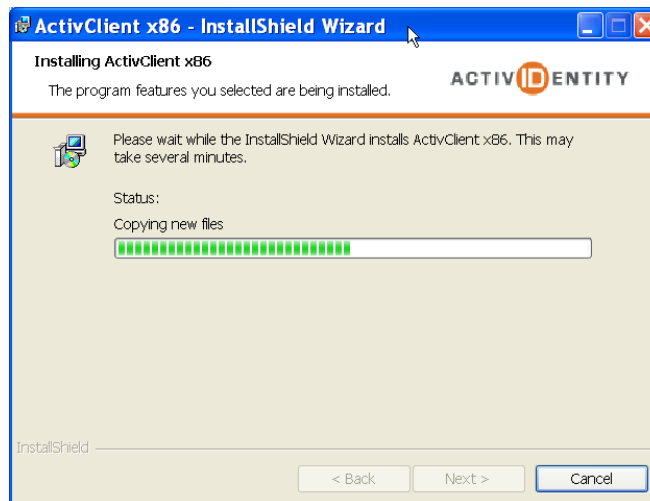


Figure 9: Installation Progress Screen

Step 12. When the *InstallShield Wizard Completed* screen appears, indicating that the ActivClient installation is complete, clear the *Show the readme file* check box, and click **Finish**.

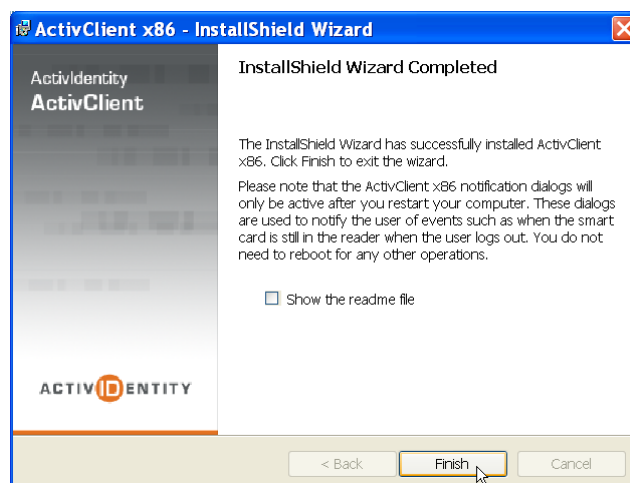


Figure 10: InstallShield Wizard Completed Screen

- Step 13. What you do next depends upon the configuration of the user's computer and if the *Installer Information* dialog box (see Figure 11) displays.
- a) If the dialog box appears and the user does NOT have an ActivIdentity smart card reader, or is **running Windows Vista**, click **No** and proceed to Step 21.
 - b) If the dialog box appears and the user has an ActivIdentity smart card reader, click **Yes** and proceed to Step 15.
 - c) If the dialog box does NOT appear and the user does NOT have an ActivIdentity smart card reader, or is **running Windows Vista**, proceed to Step 21.
 - d) If the dialog box does not appear and the user has an ActivIdentity smart card reader, proceed to Step 14.

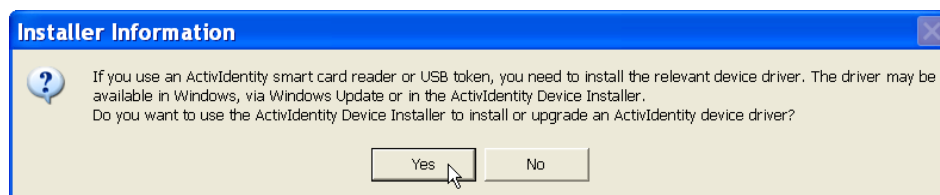


Figure 11: Installer Information Dialog Box

- Step 14. From the *ActivClient 6.2* folder, open the *Extras* folder and then open the *ActivIdentity Device Installer* folder. Click the **ActivIdentity Device Installer x86 2.2.msi** icon, or for 64-bit Vista, the **ActivIdentity Device Installer x64 2.2.msi** icon, to install the ActivIdentity smart card reader drivers.

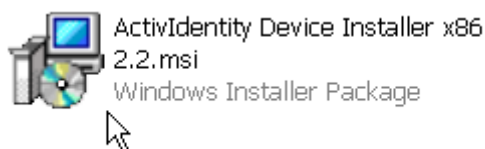


Figure 12: ActivIdentity Device Installer Icon

- Step 15. When the *Device Installer x86 - InstallShield Wizard* window appears, click **Next** at the *Welcome to the InstallShield Wizard for Device Installer x86* screen.



Figure 13: Welcome to the InstallShield Wizard for Device Installer x86 Screen

- Step 16. At the *License Agreement* screen, select the **I accept the terms in the license agreement** radio button, and then click **Next**.



Figure 14: Device Installer License Agreement Screen

Step 17. At the *Custom Setup* screen, click **Next**.

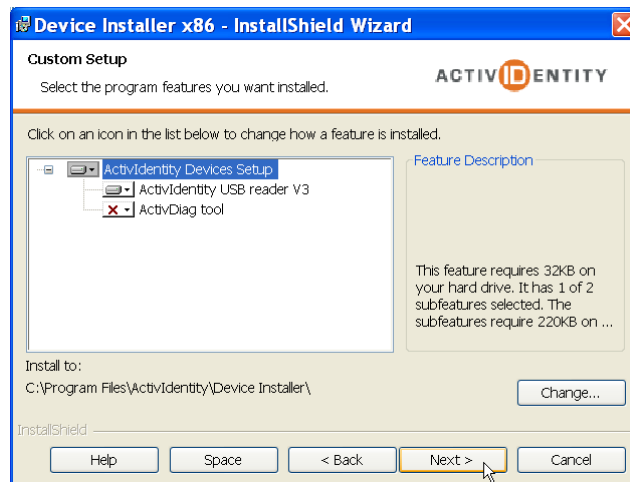


Figure 15: Device Installer Custom Setup Screen

Step 18. When the *Ready to Install the Program* screen appears, click **Install**.

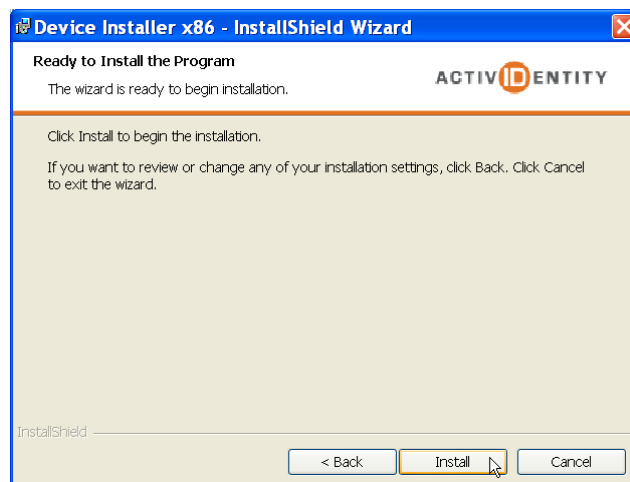


Figure 16: Device Installer Ready to Install the Program Screen

- Step 19. The InstallShield Wizard will install and configure the ActivIdentity smart card reader device driver.

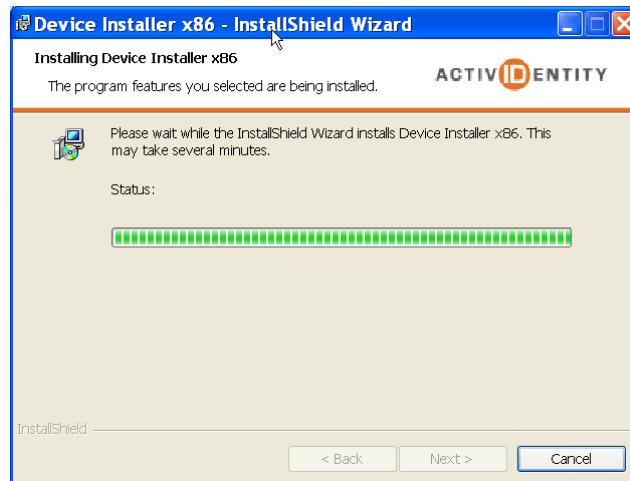


Figure 17: Device Installer Progress Screen

- Step 20. At the *InstallShield Wizard Completed* screen, clear the *Show the readme file* check box, and click **Finish**.

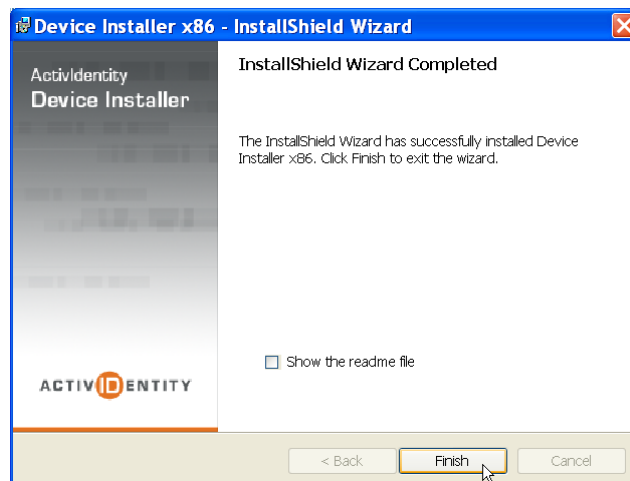


Figure 18: Device Installer Completion Screen

- Step 21. Close the *ActivClient v6.2 Installer* application by clicking the close window icon (i.e., the red **X** in the title bar of the window). See Figure 4.
- Step 22. If the user has an ActivIdentity smart card reader, plug the reader into an available USB port. Microsoft Windows should automatically install the device.
- Step 23. Reboot the computer!

3 Post-Installation Activities



Warning

After the computer reboots, log in as a non-administrator user to perform post-installation activities.

3.1 Verify Installation

- Step 1. Verify that the ActivClient icon (see Figure 19) appears in the Windows system tray (right side of the Windows toolbar, next to the date and time).



Figure 19: ActivClient System Tray Icon

- Step 2. Insert the user's smart card into the computer's smart card reader. The side with the gold chip should be facing up and this end inserted into the reader. Figure 20 is an example of this process using an external USB reader. Your reader may be different and some laptops have built-in smart card readers. Review the documentation supplied with your reader for further instructions.



Figure 20: Inserting Smart Card into USB Reader



Caution

Some smart card readers, including built-in readers, may not be compatible with the HHS smart card. See http://smartcard.nih.gov/PIV_cardreader.htm for more information.

- Step 3. With the smart card in the smart card reader, verify that the ActivClient icon changes (see Figure 21), indicating that it detected the inserted smart card.



Figure 21: ActivClient Icon with Smart Card in Reader

Step 4. Open *Internet Explorer*, and then select **Tools**→**Internet Options**.

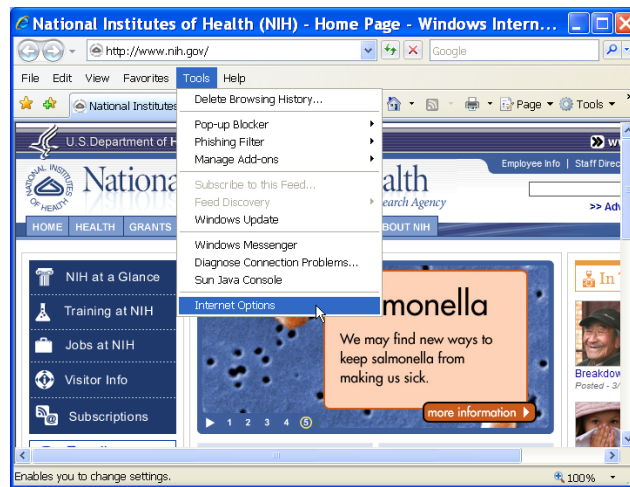


Figure 22: Internet Explorer Window

Step 5. When the *Internet Options* window appears, click the **Content** tab, and then click **Certificates**.

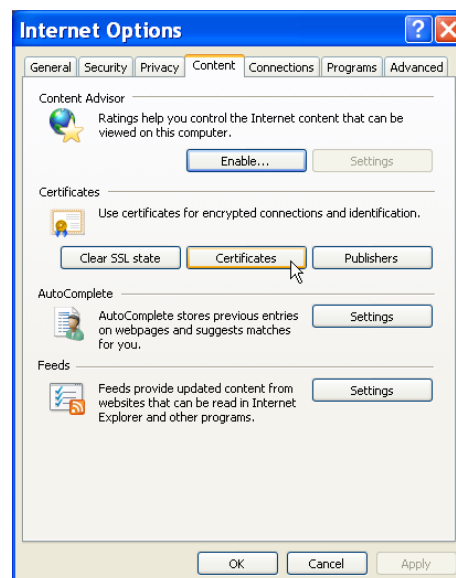


Figure 23: Internet Options Window

- Step 6. At the *Certificates* window, click the **Personal** tab. Confirm that at least four certificates issued by HHS-SSP-CA-B7 display (including one issued to PIV Users).

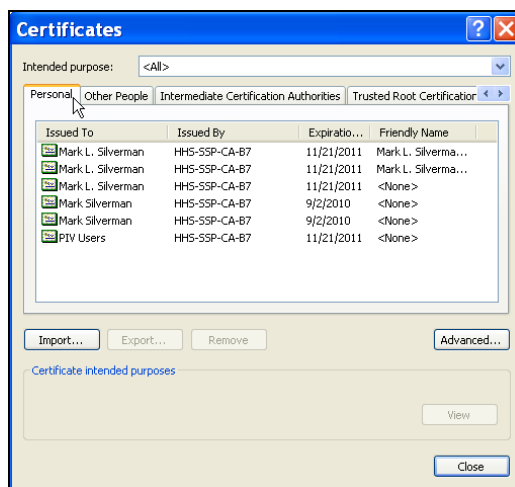


Figure 24: Certificates Window



Information

If the user previously requested HHS software certificates, more than four digital certificates are displayed in the Certificates window. Step 9 describes how to remove any unwanted extra certificates.

- Step 7. At the *Certificates* window, select one of the entries for smart card certificates (i.e., has the same expiration date as *PIV Users*), and click **View**.

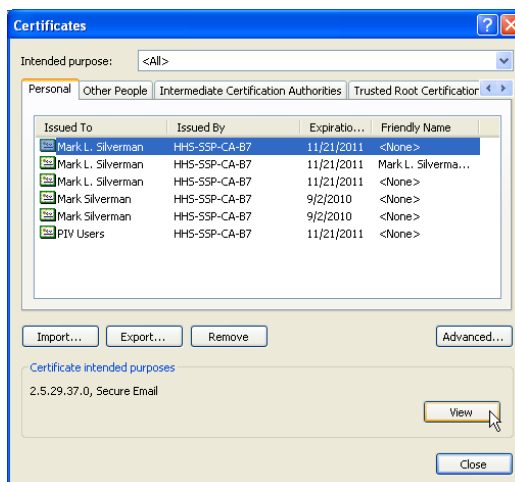


Figure 25: Selecting Certificate in Certificates Window

- Step 8. At the *Certificate* window, click the **Certification Path** tab. The certification path should appear as a hierarchy of four certificates, beginning with the *Common Policy* certificate (sometimes labeled the *FPKI Root Certificate*), then the *Trusted Production SSP CA*, the *HHS-SSP-CA*, and ending with your smart card certificate (see Figure 26).

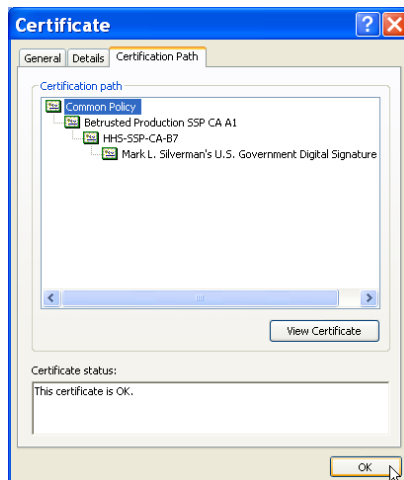



Figure 26: Certificate Window Showing Valid Certification Path



Warning

Problem certificates are flagged with a special icon  – the most common problem is that your computer does not trust the top or root certificate.

Please see [NIH Smart Card Managing Windows Certificate Chains](http://smartcard.nih.gov/Managing%20Windows%20Certificate%20Chains), located at http://smartcard.nih.gov/PKI_chain.htm for instructions on correcting these problems.



Caution

If the user has software certificates, when they use NIH Login, VPN, or digital signatures, then they are prompted to select which certificate they wish to use (i.e., their smart card certificate or their previous HHS software certificate). To avoid confusion, remove software certificates previously used for digital signatures and/or VPN access



Warning

Before performing Step 9, ask the user if it is okay to delete their old certificate(s). Once the certificates are removed, the user needs to use their smart card certificates for everything except encrypted e-mail. **Do NOT remove any certificates where the intended purpose is only Secure E-mail; if you do, the user will not be able to read previously encrypted e-mail messages.**

- Step 9. If the user has prior software certificates (see Step 6) that the user wants removed, click the certificates with an expiration date that is different than the PIV Users expiration date (normally these are the certificates with the earliest expiration date). For prior certificates where the intended purpose is **Client Authentication, 2.5.29.37.0, Secure E-mail** (see Figure 27), click **Remove** to delete this certificate.

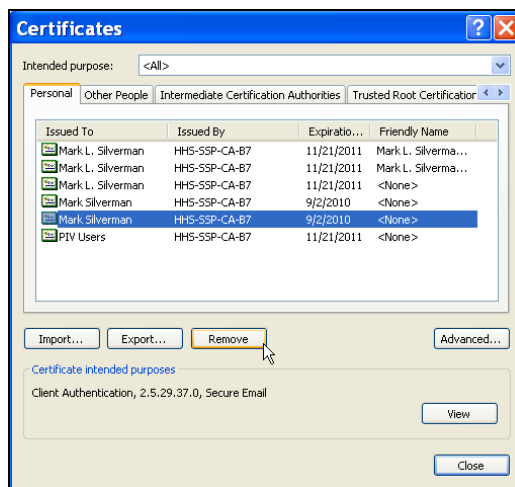


Figure 27: Removing Unwanted Authentication Certificate

3.2 Publish to GAL



Warning

Do NOT perform this step if the user has HHS software certificates (see Section 3.1, Step 6) and wishes to read encrypted e-mail on their Blackberry. Please refer to the [NIH Smart Card Outlook Configuration and User Guide](http://smartcard.nih.gov/PKI_PIVguides.htm) located at http://smartcard.nih.gov/PKI_PIVguides.htm for more information.



Caution

While recommended, this step is optional. There are some circumstances where this “Publish to GAL” process might fail. This does NOT mean the software installation has failed, assuming Section 3.1 Verify Installation was completed successfully. If this process does fail, please refer to the [NIH Smart Card Outlook Configuration and User Guide](http://smartcard.nih.gov/PKI_PIVguides.htm) for instructions on how to manually configure Outlook and publish the user’s certificate to the GAL.

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- Step 1. Insert the user's smart card into the smart card reader (see Figure 20), and then right-click the **ActivClient** icon (see Figure 21) in the Windows system tray.
- Step 2. When the *ActivClient* menu appears, click **Open**.

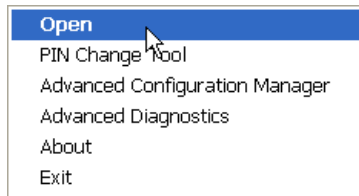


Figure 28: ActivClient Menu



Information

The displayed menu options may vary depending upon the user's system privileges.

- Step 3. When the *ActivClient* window appears, click **Tools→Advanced→Publish to GAL**.

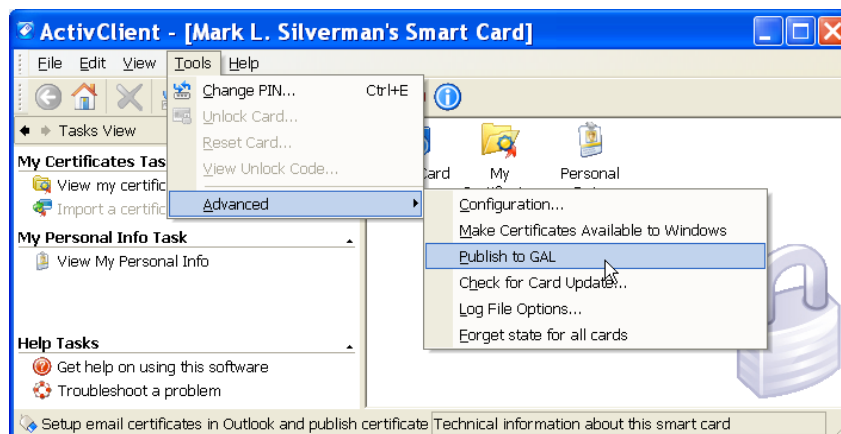


Figure 29: ActivClient Window

- Step 4. If an *Outlook Profile Update* dialog box appears, notifying you that ActivClient either configured Outlook for the user or discovered that Outlook is already configured, click **OK**.

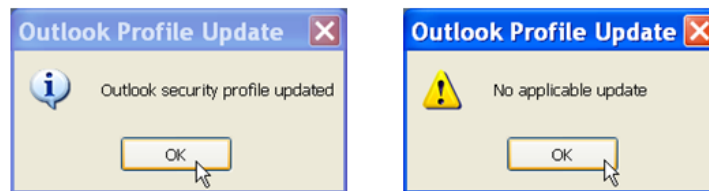


Figure 30: Outlook Profile Update Dialog Boxes

- Step 5. When the *ActivClient Login* dialog box appears, have the user enter their PIN and click **OK**.

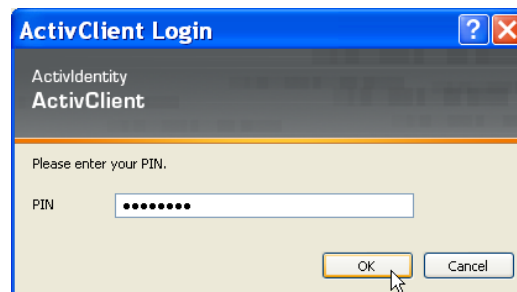


Figure 31: ActivClient Login Dialog Box

- Step 6. When a *Publish to GAL* dialog box appears, notifying you that ActivClient either published the certificates to the GAL or discovered that the GAL already contained the necessary certificates, click **OK**.



Figure 32: Publish to GAL Notification Dialog Boxes

The User is now ready to send and receive encrypted e-mail!